

DOCUMENT RESUME

ED 062 390

TM 001 328

AUTHOR Barry, Mike
TITLE A Study of an Inservice Program of Evaluation in
 Escambia County, Florida Public Schools.
PUB DATE Apr 72
NOTE 30p.; Paper presented at the annual meeting of the
 American Educational Research Association (Chicago,
 Ill., April 1972)
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Attitude Tests; *Cognitive Tests; Educational
 Accountability; *Educational Objectives; Evaluation
 Techniques; *Inservice Education; *Inservice
 Programs; Principals; Program Evaluation; Public
 Schools; School Personnel; Statistical Analysis;
 Testing; Test Results

ABSTRACT

The problem of this study was to determine the effect of an inservice education program of evaluation on school-based personnel in Escambia County, Florida, as measured by cognitive testing (knowledge) and affective (attitudinal) instrumentation. In addition, the determination of the specific objectives, met, or not met, by inservice participants was an important component of this study. (Author/CK)

ED 062390

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL POSITION OR POLICY.

A STUDY OF AN INSERVICE PROGRAM
OF EVALUATION IN ESCAMBIA COUNTY,
FLORIDA PUBLIC SCHOOLS

A Handout Prepared
For The
American Educational Research Association

April, 1972

Mike Barry
1309 Vegas Drive
Metairie, Louisiana 70003

8201001111

A STUDY OF AN INSERVICE PROGRAM
OF EVALUATION IN ESCAMBIA COUNTY,
FLORIDA PUBLIC SCHOOLS

The Problem

The problem of this study was to determine the effect of an inservice education program of evaluation on school-based personnel in Escambia County, Florida as measured by cognitive testing (knowledge) and affective (attitudinal) instrumentation. In addition, the determination of the specific objectives met, or not met, by inservice participants was an important component of this study.

Procedures

The population of the study was twenty-four elementary principals and curriculum coordinators of target Title I schools in and around Pensacola, Florida. Analysis of the data collected through cognitive, affective testing, and surveys, made it possible to numerically represent the effect of the inservice program based on the measurement instrumentation employed.

The instruction amounted to fifty-four hours, presented over twelve meetings. The instructors were university consultants, or presentors from within the school district. The main topics covered were, federal requirements, evaluation and measurement, needs assessment, objectives data processing, sampling and design, and statistics. A control group of non-participants was selected for comparison purposes. The main instrumentation used was a cognitive test constructed from instructional objectives. Population variables such as educational experience, interest in topics presented, age, and educational position were presented in an intercorrelation analysis with the cognitive, and affective instrumentation.

Findings and Conclusions

A significant difference at the .01 level of probability was found in favor of the inservice participants over the control group on the cognitive test measure. Statistical significance was not found between the attitude

measure of the control group, and the same measure for the inservice participant post-test. Also, no significant change in attitude, as measured by the instrument used, resulted from pre-test to post-test for the inservice group.

Attendance was found to be an indicator of possible success within the inservice group on the cognitive test. The intercorrelation analysis of population variables for the inservice group did not yield significant correlations with the exception of one significant negative correlation. The significant negative correlation found was between research related college course background, and the cognitive test results presented in this study.

The cognitive test items and correct answers for the test used in this study are included in this paper. Finally, a list of objectives met, or not met, for the inservice group of administrators and supervisors is presented.

RANKING OF INSERVICE PARTICIPANTS BY COGNITIVE
TEST SCORES SHOWING ATTENDANCE, ATTITUDE,
INTEREST SCORES, EDUCATIONAL EXPERIENCE, AND COLLEGE TRAINING

Per- centage Means	Cogni- tive Test	Atten- dance	Pre	Post	Attitude Difference	Inter- est Est	Yrs. in Edu.	College Training			
								Edu.	Intro.	Edu.	Meas.
55	12-12	8.2	8.2	.0	10-16	6	x	x	x	2	2
55	12-12	8.9	8.8	-.1	2-16	13	x	x	x	2	2
51	10-12	8.5	7.8	-.7	4-16	15	x	x	x	2	2
50	11-12	8.4	8.6	+.2	8-16	10	x	x	x	3	3
47	7-12	6.9	8.6	+.1.7	6-16	15	x	x	x	2	2
47	9-12	7.9	7.9	.0	0-16	6	x	x	x	2	2
47	11-12	8.5	7.7	-.8	6-16	4	x	x	x	1	1
47	9-12	4.4	8.2	+.4.4	14-16	15	x	x	x	3	3
46	8-12	8.4	8.2	-.2	4-16	13	x	x	x	2	2
46	12-12	5.0	8.4	+.3.4	4-16	20	x	x	x	3	3
45	12-12	8.9	9.0	+.1	16-16	26	x	x	x	2	2
44	10-12	8.2	8.2	.0	14-16	13	x	x	x	3	3
44	6-12	-	8.5	-	8-16	9	x	x	x	2	2
42	11-12	7.8	8.5	+.7	6-16	7	x	x	x	3	3
42	10-12	4.9	8.0	+.3.1	0-16	25	x	x	x	2	2
41	10-12	8.9	8.4	-.5	10-16	22	x	x	x	3	3
40	12-12	8.2	8.4	+.2	6-16	20	x	x	x	2	2
40	12-12	8.4	8.9	+.5	6-16	14	x	x	x	4	4
39	12-12	8.5	8.9	+.4	4-16	23	x	x	x	2	2
39	10-12	-	9.9	-	2-16	11	x	x	x	2	2
37	11-12	8.9	9.7	+.8	6-16	15	x	x	x	2	2
32	5-12	-	8.6	-	14-16	6	x	x	x	3	3
29	11-12	8.6	7.5	-1.1	8-16	36	x	x	x	2	2
29	5-12	8.4	6.2	-2.2	2-16	16	x	x	x	3	3

Per- centage Means	Cogni- tive Test	Atten- dance	Pre	Post	Difference	Attitude Inter- est est	College Training				
							Yrs. in Edu.	Edu. Intro. Meas.	Edu. Stat.	Res.	Total*
Per- centage											
Means	43	9.2-12	7.85	8.38	+.5	6.1-16	15.1	x=58%	x=45%	x=70%	2.8

NOTE: Pretest attitude scores missing for three participants.

* 1 = BS, BA
2 = MS, MA
3 = MS or MA +15
4 = Specialist

INSERVICE PARTICIPANT GENERAL OBJECTIVES BY
 SESSION AND SPECIFIC OBJECTIVES SHOWN BY SESSION
 THAT WERE MET OR NOT MET*
 N = 24

GENERAL OBJECTIVES	SPECIFIC OBJECTIVES	NOT MET	NOT MET
<u>SESSION I</u>	<u>SESSION I</u>		
1. to provide an overview and explain the purpose of the workshop	1. participants will be able to identify specific purposes of Federal programs	x	
2. to provide participants with the historical background of Federal programs and identify stimuli for evaluation	2. participants will learn to differentiate between research and evaluation.	x	6
3. to explain the differences between evaluation and research leading to an operational definition of evaluation	3. participants will be able to contrast accountability with evaluation.	x*	
4. to assist participants in understanding the significance of the term accountability.	4. participants will be able to recognize the relationship between decision making and evaluation.	x	
<u>SESSION II</u>			
1. participants will be able to	5. workshop participants will be	x	

GENERAL OBJECTIVES	SPECIFIC OBJECTIVES	NOT MET
identify the structure of an evaluation and the potential	able to identify the structure of an evaluation	
workshop participants will understand the components of evaluation and characteristics of the measurements used.	6. participants will be able to identify potential problems of an evaluation	x
3. to understand the theory of norm and criterion-referenced testing	7. participants will be able to identify measurement devices used in evaluation	x
4. participants will be exposed to examples of student involvement in curricular design and the setting of instructional goals.	8. workshop participants will be able to differentiate between a criterion and a norm referenced test.	x
<u>SESSION III</u>	<u>SESSION III</u>	
1. participants will understand the function of needs assessment in program planning	10. participants will identify the function of a needs assessment in program design	x
2. participants will learn the results of the 1969, Florida Statewide Needs Assessment	11. participants will identify one result of the 1969, Florida State Needs Assessment	x

GENERAL OBJECTIVES	SPECIFIC OBJECTIVES	MET	NOT MET
3. participants will understand the results of the 1971 Escambia County Needs Assessment	12. participants will identify the priority need determined by the 1971 Escambia County Needs Assessment	x	
4. participants will understand the Title I guidelines on program planning	13. participants will identify the function of the Title I guidelines in program planning.	x	
<u>SESSION IV</u>	<u>SESSION IV</u>		
1. to relate to workshop participants the connection between objectives and measurement.	14. participants will be able to distinguish between affective, psychomotor and cognitive objectives	x	
2. to explain to participants the historical development of systems analysis and its relationship to objectives	15. participants will be able to identify the order of the program outline for writing objectives	x	
3. to trace the origin of objective writing and to relate what experts in educational research indicate about the value of objectives	16. participants will be able to identify objectives as attitude statements	x*	
	17. attitude statements		

GENERAL OBJECTIVES	SPECIFIC OBJECTIVES	NOT MET	MET
4. to establish that objectives are attitudinal statements of educational intent, and present examples of objectives previously written by teachers in other school districts.	18. members of the workshop will be able to identify words found in poorly written objectives	x	
<u>SESSION V</u>	<u>SESSION V</u>		9
To provide an historical perspective of Escambia County's data processing system and to present current and future operating plans.	19. participants will be able to identify the purposes of an information system	x	
	20. participants will be able to identify the important components of a data system	x	
	21. participants will be able to identify the purpose of the Escambia <u>SIRS</u> program	x*	
	22. participants will be able to identify the scope of the Escambia County Data Board	x	
<u>SESSION VI</u>	<u>SESSION VI</u>		
1. to enable workshop participants to understand sampling; design and distinguish between assessment and evaluation	23. participants will be able to distinguish between assessment and evaluation	x	
	33. *		

GENERAL OBJECTIVES	SPECIFIC OBJECTIVES	NOT MET	
		MET	MET
2. to assist workshop participants in understanding how experimental design and the validity of a design relates to practical evaluative situations.	24. participants will be able to identify the basic elements of sampling theory 31. participants will be able to identify external and internal validity	x	
	25. participants will be able to identify external and internal validity	x	
	30. participants will be able to identify one cause of internal validity	x	
	26. participants will be able to distinguish between goal statements and objectives	x	
	27. participants will be able to identify subjective measures	x	
	28. participants will be able to identify one objective of experimental design	x*	
	29. participants will be able to identify basic requirements of test construction	x**	
	32. participants will be able to identify basic requirements of test construction	x**	
	34. participants will be able to identify basic requirements of test construction	x**	

GENERAL OBJECTIVES	SPECIFIC OBJECTIVES	MET	NOT MET
<u>SESSION VII</u>	<u>SESSION VII</u>		
1. to instruct workshop participants in the areas of fundamental statistical concepts	35, 36, 37, 38, 39, 41, 43, 44, 45, 46, 47. workshop participants will be able to identify fundamental statistical terms related to central tendency measures	x*	x*
2. to instruct workshop participants in the preparation of data for basic analysis	40. workshop participants will be able to recognize the intent of statistical correlation	x	
3. to present each person present at the workshop with a set of data and instruct that person to perform basic statistical analysis	42. 48. workshop participants will be able to identify simple significance measures and confidence limits	x	
	49.		
<u>SESSION VIII</u>	<u>SESSION VIII</u>		
1. to provide information on the type of services available from the testing department	50. workshop participants will be able to identify the major purposes of evaluation and testing services	x	
2. to discuss the means by which the services are acquired and the criteria for their use	51. workshop participants will be able to identify the standard deviation as a method by which a distribution is structured and given form	x	

GENERAL OBJECTIVES	SPECIFIC OBJECTIVES	NOT MET	MET
	53. workshop participants will be able to identify the use for the test analysis program	x	
<u>SESSION IX</u>	<u>SESSION IX</u>		
1. to provide information relative to classical research design so as to build individual designs usable for the 1971 school year	54. participants will be able to identify specific evaluative techniques	x	
2. to provide practical design illustrations that might be utilized in constructing evaluation designs for use in Escambia County schools	55. participants will be able to recognize the three dimensions of the EPIC model	x*	
3. to provide individual assistance for relating objectives to evaluation design	56. participants will be able to identify different objective components and variations	x	
	57. participants will be able to identify the Hawthorne effect	x	
	58. participants will be able to identify sources of internal invalidity	x	
60. participants will be able to identify Campbell and Stanley's first four experimental designs and design six	61.	x	

GENERAL OBJECTIVES

SPECIFIC OBJECTIVES

NOT
MET

63. participants will be able to identify and differentiate between objective domains

x

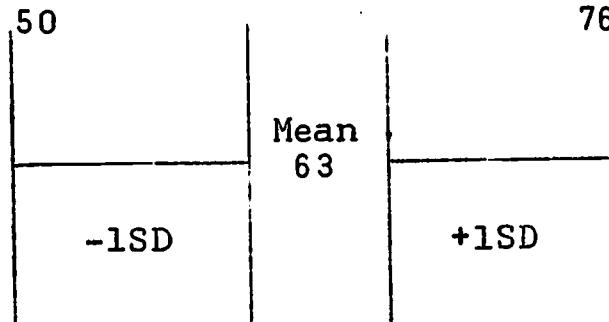
63, 66, participants will be able to solve problems related to selection of appropriate experimental designs

x

*Reliability coefficient unsatisfactory

INSERVICE PARTICIPANT ITEM DISTRIBUTION
BY PERCENTAGE OF ITEMS CORRECT
ON THE COGNITIVE TEST
N = 24

0 - 49% Correct Test Item No.	50 - 62% Correct Test Item No.	63 - 75% Correct Test Item No.	76 - 100% Correct Test Item No.
1	25	6	5
2	26	9	7
3*	28	11	8
4	34*	13	10
16*	43	20	12
18	48	23	14
21*	49	24	15
33*	63	30	17
38	65	37	19
39*	69	47	22
42		51	27
44*		59	29*
45*		60	31
46		61	32
52			35
55*			36
64			40
57			41
58			50
66			53
67			54
68			56
			62
Totals	22	10	14
			23



*Reliability coefficient unsatisfactory

CONTROL GROUP
 PERCENTAGE OF ITEMS CORRECT
 PLOTTED ON THE INSERVICE
 PARTICIPANT DISTRIBUTION
 N = 27

0 - 49% Correct Test Item No.	50 - 62% Correct Test Item No.	63 - 75% Correct Test Item No.	76 - 100% Correct Test Item No.
4	46	1	5
13	47	3*	8
14	48	7	12
16*	49	20	15
18	52	24	71
21*	55*	28	19
23	57	29*	27
26	58	34*	31
30	59	41	32
33*	60	51	40
36	62	63	50
37	64		53
38	65		
39*	66		
42	67		
43	68		
44*	69		
45*			
<hr/>			
Totals Control N = 27	35	11	12
<hr/>			
Totals Inservice Partici- pants N = 24	22	10	14
			23
<hr/>			

*Reliability coefficient unsatisfactory

Cognitive Test Questions

1. Which of the following groups are not identified specifically as eligible for Title I Programs:
 - (a) handicapped
 - (b) delinquents
 - (c) pre-school children
 - (d) adults
 - (e) dropouts
2. One difference between evaluation and research is in the use of:
 - (a) statistical analysis
 - (b) value judgements
 - (c) computers
 - (d) data collection
3. If accountability is taken as an "end," evaluation can be considered to be the:
 - (a) same
 - (b) means
 - (c) opposite
 - (d) beginning
4. As a concept, evaluation can be best equated with:
 - (a) process
 - (b) procedure
 - (c) data
 - (d) decisions
5. Evaluations should be planned by:
 - (a) a systematic approach
 - (b) the project director
 - (c) children
 - (d) a standardized test
6. Potential problems found in evaluation include:
 - (a) the use of invalid testing procedures
 - (b) lack of local norms
 - (c) lack of time
 - (d) all of these
7. All of the following are acceptable measurement devices for use in evaluations except:
 - (a) norm-referenced testing
 - (b) criterion-referenced testing
 - (c) testimonial letters
 - (d) attendance check lists

8. In criterion referenced testing, it is important to know:
 - (a) whether norms are met
 - (b) which objectives are met
 - (c) which objectives are not met
 - (d) both b and c
9. One way in which a norm reference test differs from a criterion referenced test is that the criterion referenced test has:
 - (a) little value
 - (b) no comparison group
 - (c) no validity
 - (d) no reliability
10. The educational priorities in Escambia County School System's Title I Program are basically determined from:
 - (a) accreditation standards
 - (b) Advisory Council recommendations
 - (c) needs assessment
 - (d) School Board decisions
11. One result of the Needs Assessment conducted by the State has been to:
 - (a) revalidate the 9th grade testing program
 - (b) revise accreditation standards
 - (c) encourage educational assessment programs
 - (d) establish a new department in DOE
12. The priority need of disadvantaged students as determined by the Escambia County Needs Assessment is:
 - (a) teacher aides
 - (b) reading
 - (c) summer programs
 - (d) free lunch
13. Title I Programs must agree completely with:
 - (a) accreditation standards
 - (b) Title I Advisory Committee Policy
 - (c) Title I Guidelines
 - (d) all of these
14. Often, a list of program objectives will include multiple domains such as:
 - (a) cognitive
 - (b) affective
 - (c) cognitive and affective
 - (d) psychomotor

15. The next logical statement to follow the general objective is the:

- (a) behavioral criterion
- (b) specific objective
- (c) experimental design
- (d) needs statement

16. In the final analysis, objectives may best be described as statements of:

- (a) intent
- (b) attitudes
- (c) fact
- (d) both a and b

17. Poorly written specific objectives often contain the following words:

- (a) appreciate, understand
- (b) cite, list
- (c) identify, differentiate
- (d) compare, contrast

18. The process of writing objectives assists the program planner because:

- (a) it provides budget information
- (b) provides behavioral criteria
- (c) relates objective and evaluation
- (d) all of these

19. An information system provides facts for:

- (a) decision making only
- (b) effective administration only
- (c) research only
- (d) curriculum development only
- (e) all of these

20. An important component of a data system is:

- (a) personnel
- (b) procedures
- (c) coding capability
- (d) none of these
- (e) all of these

21. SIRS would provide an integrated data base for:

- (a) student information
- (b) payroll information
- (c) systems information
- (d) none of these

22. The Escambia County Data Board was established to meet the data processing needs of the:

- (a) School Board
- (b) City of Pensacola
- (c) County
- (d) all of these

23. Initial assessment procedures are designed to provide information about:

- (a) individual progress
- (b) instructional methods
- (c) accreditation levels
- (d) group characteristics

24. Sampling techniques assume that:

- (a) parameters are known
- (b) a population is precisely defined
- (c) a population is normally distributed
- (d) none of these

25. Internal validity is related to:

- (a) differences in pre-post scores
- (b) a level of .732 or better
- (c) a type of experimental design
- (d) the effectiveness of the design

26. In an educational experiment, the history means:

- (a) pupil folders
- (b) unplanned events between pre and post tests
- (c) the rationale and hypothesis of the experiment
- (d) all of these

27. "To install in children a life-long love of poetry" is an example of a:

- (a) cognitive objective
- (b) specific objective
- (c) goal statement
- (d) measurable objective

28. An interest inventory is an example of:

- (a) subjective measurement
- (b) criterion referenced measurement
- (c) unsatisfactory evaluation
- (d) norm referenced measurement

29. Experimental designs are used to:

- (a) evaluate effectiveness of a treatment
- (b) measure differences between groups
- (c) justify expenditures
- (d) set of educational programs

30. An educational experiment that can be generalized is said to have:

- (a) good design
- (b) logical choice of subject
- (c) appropriate statistical analysis
- (d) external validity

31. In drawing a sample, it is best to use:

- (a) randomization
- (b) alphabetical order
- (c) teacher recommendation
- (d) volunteers

32. When constructing a test, factors to be considered are:

- (a) validity
- (b) reliability
- (c) usability
- (d) all of these

33. Evaluation procedures are designed to measure:

- (a) group characteristics
- (b) internal validity
- (c) individual characteristics
- (d) efficiency of teachers

34. Reliability is defined as:

- (a) content validity
- (b) external validity
- (c) consistency of scores
- (d) appropriateness of level

35. The term "normal distribution" refers to:

- (a) a special statistic
- (b) the way grades are assigned
- (c) the shape of a frequency distribution
- (d) an ogive
- (e) none of these

36. "Mean" is defined as:

- (a) the middle score
- (b) the average score
- (c) the most frequent score
- (d) all of these
- (e) none of these

37. The symbol Σ means:

- (a) product
- (b) sum
- (c) sigma
- (d) significance
- (e) none of these

38. The standard deviation is a measure of the:

- (a) relationship of the mean and the median
- (b) validity of a test
- (c) variability of scores
- (d) reliability of a score
- (e) none of these

39. The first step in analyzing data is to:

- (a) find the mean
- (b) rank the scores
- (c) find the range
- (d) tally
- (e) none of these

40. Correlation is:

- (a) the common mean of two tests
- (b) the relationship between two sets of scores
- (c) technique for determining internal validity
- (d) a measure of external significance
- (e) none of these

41. A frequency polygon is:

- (a) a method of analyzing data
- (b) the same as an ogive
- (c) a shortcut in calculating the standard deviation
- (d) a graphed frequency distribution
- (e) none of these

42. A correlation may be any value between:

- (a) 0 and ∞
- (b) +1.0 to -1.0
- (c) +100 to -100
- (d) +1.0 to 0
- (e) none of these

43. The formula $\frac{\sum x}{N}$ is used to calculate the:

- (a) mean
- (b) median
- (c) standard deviation
- (d) 50th percentile
- (e) none of these

44. In figure A, the mean falls in the interval:

- (a) 4 - 6
- (b) 7 - 9
- (c) 10 - 12
- (d) none of these

45. In figure A, the median falls in the interval:

- (a) 4 - 6
- (b) 7 - 9
- (c) 10 - 12
- (d) none of these

46. Figure A is an example of:

- (a) a normal distribution
- (b) a frequency polygon
- (c) a histogram
- (d) none of these

47. Figure B is an example of:

- (a) a normal distribution
- (b) an ogive
- (c) a platykurtic distribution
- (d) none of these

48. A t-test is one measure of:

- (a) statistical regression
- (b) statistical significance
- (c) reading vocabulary
- (d) test validity

49. Confidence limits in statistics represent the:

- (a) theoretical foundation of test construction
- (b) technique of item analysis
- (c) probability that results are due to chance or error
- (d) desired outcome of the program

50. The basic purpose of Evaluation Services is to provide data on pupil performance for:

- (a) administrative decisions
- (b) curricular decisions
- (c) instructional decisions
- (d) learner decisions
- (e) all of these

51. The standard deviation is most nearly like which of the following:

- (a) dress
- (b) shoe
- (c) jewelry
- (d) girdle

52. All of the following services are provided by Evaluation and Testing Services except:

- (a) scoring of answer sheets for teacher-made tests
- (b) class and item analyses
- (c) parent reports for grades 3 and 9
- (d) simulation designs
- (e) interaction analysis

53. The Test Analysis Program and Response Analysis Program can be used for:

- (a) standardized test
- (b) teacher constructed tests
- (c) questionnaires
- (d) survey
- (e) all of these

54. The initial step in planning a program is:

- (a) consultation with administrative staff
- (b) library research
- (c) testing
- (d) needs assessment

55. The EPIC model for evaluation has the three dimensions of:

- (a) content, method and subject
- (b) cognitive, affective and psychomotor
- (c) student, teacher and school
- (d) institutional, behavioral, instructional

56. A behavioral objective consists of:

- (a) a student part and a teacher part
- (b) outcome and measurement
- (c) performer, expected outcome and performance standard
- (d) action and behavior

57. The Hawthorne effect can be:

- (a) helpful to the experimenter
- (b) both positive and negative
- (c) eliminated statistically
- (d) none of these

58. Experimental mortality is a factor in:

- (a) external validity
- (b) pupil selection
- (c) internal validity
- (d) sampling procedures

59. Program objectives are most nearly equivalent to:

- (a) behavioral criteria
- (b) needs statements
- (c) general objectives
- (d) specific objectives

60. X0 is the symbolic representation for an experimental design known as:

- (a) time series
- (b) static group comparison
- (c) one shot case study
- (d) Solomon Four Group Design

61. ROXO indicates that subjects were selected:

- (a) from remedial reading classes
- (b) alphabetically
- (c) according to the Rudovich Design
- (d) randomly

62. Behavioral criteria are most nearly equivalent to:

- (a) specific objectives
- (b) evaluative instruments
- (c) techniques for behavior modification
- (d) performance standards

63. Objectives in the affective domain are:

- (a) difficult to measure
- (b) rarely written
- (c) similar to psychomotor objectives
- (d) both a and b

64. Semantic differential is:

- (a) an experimental approach to work attack skills
- (b) a technique utilizing bipolar adjectives
- (c) suitable for pre-school children
- (d) none of these

EXAMPLE A

A third grade teacher decided to experiment with a new approach to reading instruction. She divided her class into two parts, and used her regular method with one half and the new method with the other half. At the end of the year, she compared the reading levels of the two groups and found that the experimental group scored three points higher than the regular group.

65. The experimental design for example A is:

- (a) excellent
- (b) good
- (c) fair
- (d) poor

66. The design in example A can be classified as:

- (a) time series
- (b) pre-post observation with control group
- (c) static group comparison
- (d) none of these

67. A possible source of internal invalidity in example A is:

- (a) selection
- (b) experimental mortality
- (c) instrumentation
- (d) all of these
- (e) none of these

EXAMPLE B

An inner city school developed a new program for disadvantaged first graders. Children entering first grade without kindergarten experience were randomly assigned to standard and experimental first grade classrooms. At the end of the year, an analysis of test results indicated that children in the experimental classrooms achieved at a level 9% higher than the average of the past five years.

68. The design in example B can be classified as:

- (a) static group comparison
- (b) random pre-post observation
- (c) time series
- (d) observation with control group

69. A flaw in this design tests with:

- (a) selection of comparison groups
- (b) assignment of pupils
- (c) choice of tests given
- (d) age of pupils

SUMMARY AND RECOMMENDATIONS

When considering the question of the effect of an evaluation inservice training program, one needs to examine a present educational trend. One of the most recent issues raised by school publics and educators has been accountability. The author of this study believes that there is a certain amount of cognitive knowledge necessary for carrying out the evaluation process so closely related to accountability. Further, an assumption is made by the author that the cognitive test utilized in this study has content relevant to the skills educators need to carry out responsible evaluation procedures. Evidence in this study indicates no significant relationship between the educational position of personnel in Escambia County and their results on the cognitive test for this study. Perhaps this suggests that no one group of educators should be the target group for carrying out the evaluation process. Instead the evaluation process might be just as easily approached by extending the knowledge necessary, and the responsibility involved, to all professional components of a school district. In addition, the cognitive test results in this study indicate that the subject matter content may be difficult to transfer to practicing educators.

Negative relationships between research related col-

lege courses and the cognitive results for this study may indicate that higher education does not now provide the necessary cognitive skills for carrying out an evaluation in a practical public school situation. At the least, it perhaps indicates that the subject content of the college courses may not be related to the content of the cognitive test used in this study. The fact that twenty out of twenty-four inservice participants did not score 70 percent on the test is not necessarily an indictment of the participants, for the situational and instructional process also play an important role. The cognitive test was difficult (63 percent), but considering the way the test items were constructed and related to content, the test may be considered as having content validity for the cognitive instruction.

The length of sessions, amount of time between sessions, and the ability of the consultants and presentors to convey what they have to teach are of course important variables not specifically controlled for in this study. Future inservice programs might do well to consider the aforementioned three factors. The planning time allotted between the inservice planners, and the consultant or presentor, should be used wisely. The school district might fare better by providing extra care when setting objectives

and contracting with consultants for exactly what is determined as the inservice training needs of the respective district.

Evaluating inservice programs in terms of objectives is a logical path for educators to follow. It is the author's opinion that specific objectives should be written or rewritten after each session has been completed so that the measurement devised is focused on what happened, not on what was projected to happen. Test questions and specific objectives might be better representations of content, and of better measurement quality, if the consultant or presentor actually participated in their formulation.

Considering the difference between the inservice group and control groups stratified with principals, central office staff, and teachers, the cognitive success as measured by the test given in this study is a success indicator for the inservice program planners in Escambia County.

In the future, attention might be given to the personal individual characteristics present in a group as diverse as the group that the inservice program was planned for in this study. Subject matter field diversity, individual interests, and especially the problems encountered daily in educational experiences, all are relevant targets for personalizing an inservice program to achieve better results. An Interest

Inventory administered in this study collected data about related areas of recent training in evaluation related to projected topics of the planned program. In terms of recency, the inservice participants responding did not indicate experiential strengths as a group in such areas as evaluation design, use of objectives in evaluation, data processing, statistics and the other areas listed. The preceding cognitive test results and the tables which list specific objectives met or not met, tend to indicate a successful overall effort by Escambia County Schools for engaging in the inservice program evaluated in this study.

Using the criteria of below 50 percent (-1SD) as a group as the point at which an objective was not met, the specific objectives for the inservice program have already been presented in this paper in their entirety. In a case where more than one test question was criterion-referenced to only one objective, the number of items correct, and the place on the distribution, or standard deviation, were taken into account for making the judgment met or not met.